

3 May 1957

Dr J. Lederberg,  
Genetics Department,  
University of Wisconsin,  
Madison, Wis.

Ref. Skaar et al., PNAS 43:329.

Dear Joshua,

Since I don't know Skaar, I cannot protest to him as vehemently as I can to you that I don't like "motilization". I don't like "chemostat" either, and "substrains" and other argot, but it's probably too late to do anything about them now. (Provasoli refers to contaminated algae as "bacterized", which I find equally offensive.)

More seriously, why risk explosions (footnote 4)? I should have thought that the spreading of colonies on 0.4% agar in plates would provide a suitable device for the selection of more motile strains; or why not put a glob of bacterized agar at the bottom of a tube, fill up with 0.4% agar, and race the organisms to the surface?

I lost myself on footnote 3 (p.332, line 3), which sounded interesting.

Can F have anything to do with the filaments which Maccacaro & Angelotti discuss in Giorn. di Microbiol. 1:85-96, 1956? I often wondered what they are doing.

Could you not select for F+ to F- mutations by a replica plating method? Grow up a few hundred F+aB, stamp out on a complete plate, and then on a minimal plate spread evenly with F-Ab. Provided you get enough matings, there should be a smudgy colony for every original F+aB, whereas mutants to F-aB would be represented on the complete plate only. I suppose you could re-replicate from the mixed plate to some suitable phage plate if you are worried by syntrophy problems. (I hope you can get mating on agar. I know you used not to in the primaeval days, but things seem to change so rapidly.)

I'm sure the climate in California is much nicer than that of Wisconsin.

Best wishes to Esther.

Yours,

Ralph

